

For this study, the impacts to wetlands areas were determined using the National Wetlands Inventory Mapping which is available from the U.S. Fish and Wildlife Service. It is important to note that this mapping is a draft and is the best estimate of the approximate location of wetlands. Development of these maps was based on aerial photography and has not been field checked. Therefore, more extensive environmental investigations are required prior to design of a facility.

Impacts to wetlands from proposed facilities and widenings were determined using available mapping. As a result, all wetland impacts that were found were avoided to the greatest extent possible, while preserving the integrity of the Thoroughfare Plan.

### THREATENED AND ENDANGERED SPECIES

A preliminary review of the Federal List of Threatened and Endangered Species within Richmond County was conducted to determine the effects that proposed corridors could have on the wildlife. These species were identified using mapping from the North Carolina Department of Environmental, Health and Natural Resources.

The Threatened and Endangered Species Act of 1973 allows the U.S. Fish and Wildlife Service to impose measures on the Department of Transportation to mitigate the environmental impacts of a road project on endangered plants, animals and critical wildlife habitats. By locating rare species in the planning stage of road construction, it is possible to avoid or minimize these impacts.

There were six federally listed endangered species and one federally listed threatened species in Richmond County, which follow. None of these were in locations where proposed facilities were recommended. The proposed upgrade of Reicel Road from a dirt path to a two-lane facility is close to a natural occurring event and should be studied before any construction begins. Other species may exist in the area, therefore, a detailed field investigation is recommended prior to construction of any highway project.

#### **Endangered Species:**

*Acipenser Brevirostrum* (Shortnose Sturgeon)  
*Picodes Borealis* (Red-Cockaded Woodpecker) *Lysimachia*  
*Asperulifolia* (Rough-Leaf Loosestrife)  
*Muhlenbergia Torreyana* (Pinebarren Smokegrass)  
*Rhus Michauxii* (Michaux's Sumac)  
*Rhynchospora Macra* (Southern White Beaksedge)

#### **Threatened Species:**

*Ambystoma Tigrinum* (Tiger Salamander)